Economic Analysis of Sediment Management in California

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The focus of this study is Regional Sediment Management. The US Army Corps of Engineers and other government agencies are attempting to coordinate their dredging, nourishment, flood control and habitat restoration projects in a cost-effective way. In particular, there is a significant amount of opportunistic sediment in California—sediment that is dredged or needs to be removed from a particular location that could be transported to coastal sites within the State that are in need of sediment, especially eroded beaches in Southern and Central California.

While the Corps is also conducting regional sediment plans, their analysis is restricted to Corps projects, and the benefits they derive from the use of opportunistic sand may only be calculated if and when there is a Federal interest. There are a number of other state and local projects (e.g., emptying of debris basins, wetlands restorations) which generate opportunistic sediment but will not be included in *any* study by the COE. This study will examine the interest of the State of California, as well as local governments. The analysis will also include benefits that are derived from the use of opportunistic sediment from Corps projects.

We are currently conducting an economic study of sediment management in California, focusing on areas where information about opportunistic sediment and the benefits from its use are well known. In particular, we are examining regional sediment management issues in Ventura and southern Santa Barbara Counties and related watersheds, flood control projects, harbors, and beaches. Our study will examine the following sources of sediment:

a) Material from the Corps' dredging activities in Ventura, Santa Barbara and the Channel Islands.

b) Material from dams and debris basins in the area.

c) The potential for material from other flood control projects such as the Goleta slough.

d) The potential for material from the creation of wetlands in Carpinteria.

For the potential benefits of the project, we will examine the economic benefits of adding sand to three specific beaches in the area:

a) Carpinteria's City and State beaches.

b) "Oil Pier's" beach just north of Ventura.

c) Goleta beach.

The study will:

- Quantify the *net* costs of sorting, transporting and distributing opportunistic sediment from their sites to the three beaches above—net costs are defined as additional costs of transport beyond the receiver site currently used;
- Quantify the net benefits of this sediment transport and beach nourishment at the local, State and National levels;
- Discuss other areas in the State that would potentially benefit from opportunistic nourishment and how the results of this study could be generalized/transferred to these sites.